

AUG 17 2007

10/653,825

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) An inspection system comprising:
a rotating prism having a first end and a second end, where the first end receives a first image area and rotates about a center point so as to cover a field of view area that is larger than the first image area, and the second end remains centered on the center point and provides the first image to a view area that has constant dimensions; and
an image data system disposed at the second end of the rotating prism, the image data system generating image data as the prism rotates so as to generate two or more sets of image data from the field of view area.

Claims 2-4 (cancelled).

5. (Original) The system of claim 1 further comprising a quadrant inspection system coupled to the image data system, the quadrant inspection system receiving image data from one of four quadrants of the field of view area.

6. (Original) The system of claim 1 further comprising a prism rotation controller coupled to the rotating prism, the prism rotation controller setting the rotation speed of the prism.

7. (Original) The system of claim 1 further comprising an image data acquisition control coupled to the image data system, the image data acquisition control setting an image capture rate.

8. (Currently amended) The system of claim 1 further comprising a quadrant data analysis system receiving the image data and generating die quadrant **image inspection pass/fail** data.

10/653,825

9. (Original) The system of claim 1 further comprising a die identification system receiving the image data and generating die image data.

10. (Currently amended) The system of claim 1 further comprising a component identification system receiving the image data and generating component ~~image~~ identification data.

11. (Original) The system of claim 1 further comprising a component inspection system receiving the image data and generating component pass/fail data.

12. (Original) A method for inspection comprising:
receiving image data of a first area from a prism;
generating first area image data;
rotating the prism;
receiving image data of a second area from the prism;
generating second area image data.

13. (Currently amended) The method of claim 12 further comprising:
receiving image data of a third area from the prism;
generating third area image data;
rotating the prism;
receiving image data of a fourth area from the prism;
generating fourth area image data; and
wherein an item is inspected using the first area image data, the second area image data, the third area image data, and ~~[[a]]~~ the fourth area image data.

14. (Original) The method of claim 13 wherein the item is a semiconductor die.

15. (Currently amended) The method of claim 13 wherein the first area image data corresponds to a first quadrant of a semiconductor die, the second area image data corresponds to a second quadrant of the semiconductor die, the third area image data corresponds to a third

10/653,825

quadrant of the semiconductor die, and ~~[[a]]~~ the fourth area image data corresponds to a fourth quadrant of the semiconductor die.

16. (Original) A method for inspecting a semiconductor die comprising:
receiving image data of a first area from a prism;
generating first area image data that includes a first section of the semiconductor die;
rotating the prism;
receiving image data of a second area from the prism;
generating second area image data that includes a second section of the semiconductor die.

17. (Original) The method of claim 16 wherein the first section and the second section are each quadrants of the semiconductor die, and the prism is further rotated to generate image data of all four quadrants of the semiconductor die.

18. (Original) The method of claim 16 further comprising rotating the second area image data to align with the first area image data.

19. (Original) The method of claim 18 further comprising eliminating overlapping sections of the image data.

20. (Original) The method of claim 16 further comprising analyzing the second area image data based on a predetermined angular relationship to the first area image data.

21. (Previously Presented) The system of claim 1 wherein the image data system comprises means for generating two or more pixel arrays of image data from a rotating prism within a field of view.

22. (Previously Presented) The system of claim 1 further comprising means for identifying component edges from image data generated by the rotating prism.

10/653,825

23. (Previously Presented) The system of claim 1 further comprising means for setting an image capture rate using a prism rotation speed.